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RFID Based Purchase Assistance System.

Abstract

Purchase assistance system projects a system which can serve as a building block for various other systems meant to assist sales and purchase in the retail business of the future. The system advocates the use of RFID (Radio Frequency Identification) at first place in order to facilitate data transfer between the user and the system.

This thesis proposes a novel architecture of a system that keeps track of human's requirements and help him by firing an alert as soon as he/she enters a supermarket and gets within the range of the shelf that bear any product of his/her choice. Radio waves transfer the identification of the person from his standpoint to the shelves and thus the respective shelf recognizes him and his requirements enlisted earlier through the internet. Further the updating of the list is to be looked upon if some of the items from the list have already been purchased.

A protocol is developed to facilitate communication between the transmitter and the receiver. RTF (Reader talk first) approach is used to develop the protocol suit and the message formats used are quite generalized so as to incorporate various other features within the system in the future without any overhead.